

Date: Thursday, 6/15/2006 1:56:14 PM  
 User: Kim Johnston

## Process Sheet

Customer : CU-DAR001 Dart Helicopters Services Drawing Name : STEP SPACER  
 Job Number : 27590D  
 Estimate Number : 10380  
 P.O. Number : N/A Part Number : D30657  
 This Issue : 6/15/2006 S.O. No. : N/A Drawing Number : D3065 REV. A2  
 Prsht Rev. : NC Project Number : N/A  
 First Issue : 6/15/2006 Type : SMALL /MED FAB Drawing Revision : A2  
 Previous Run : 26928D Material : N/A  
 Due Date : 7/2/2006 Qty: 60 Um: Each  
 Written By : AK 06.06.15  
 Checked & Approved By : AK 06.06.15  
 Comment : Est:C 02.11.01 Incorporated D3066-1 IPP KJ/RF  
 Est Rev:D Now on Water Jet 06-04-11 JLM

## Additional Product

Job Number:



Seq. #: Machine Or Operation: Description :

1.0 M2024T3S040 2024-T3 .040 sheet



Comment: Qty.: 0.1653 sf(s)/Unit Total : 9.9162 sf(s)

Material: 2024-T3 (QQ-A-250/4) 0.040" thick

(M2024T3S.040)

Batch: 0601417

AK

06 07 10

2.0 WATER JET FLOW WATER JET



Comment: FLOW WATER JET

1-Cut as per Dwg D3065

Dwg Rev: A2

Prog Rev: A2

2-Deburr if necessary

AK

06 07 10

(50)

3.0 QC2 INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

AK

06 07 10

(50)

4.0 QC8 SECOND CHECK



Comment: SECOND CHECK

06-07-11  
Counted

59

5.0 SMALL FAB 1 SMALL & MEDIUM FAB RESOURCE 1





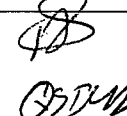
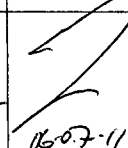
Comment: SMALL & MEDIUM FAB RESOURCE 1


Deburr if necessary.

SAN 06/07/11

(59)

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                 |                          |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Mfg / Design<br>Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                 |                          |
|      |      |                    |    |      |     |                                 |                          |

| NCR:     |      | WORK ORDER NON-CONFORMANCE (NCR)                               |   |                                  |                 |   |   |   |
|----------|------|--|---|----------------------------------|-----------------|---|---|---|
| DATE     | STEP | Description of NC<br>Section A                                 | Corrective Action Section B   |                                  |                 | Verification<br>Section C   | Approval<br>Design Mgr  | Approval<br>QC Inspector  |
|          |      |  | Initial<br>Design Mgr   | Action Description<br>Design Mgr | Sign &<br>Date  |   |   |   |
| 06-07-11 | 2    | 1 part scrap. minor delamination on one hole on the water jet. |  | destroy.                         | SAD<br>06-07-11 | <br>06-07-11 | <br>06-07-11 | <br>06-07-11 |
|          |      |  |   |                                  |                 |   |   |   |
|          |      |  |   |                                  |                 |   |   |   |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes ☒ No ☐ DQA:  Date: 06/08/31

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Date: Thursday, 6/15/2006 1:56:14 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP SPACER

Job Number: 27590D

Part Number: D30657

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Bend as per Dwg D3065

SB 06/08/17 59

7.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

06-08-23 (59) cont.

8.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

DL 06/08/29 (59)

9.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT CHEMICAL CONVERSION COAT

12 6/8/29 (59)

10.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: ~~STEP 1~~ 37121

6/8/30 (59)  
LB 06/08/30 (59)

11.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL

Inspection Level 21

06/08/31 (59)

Job Completion



(206108130

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                 |                          |
|------|------|--------------------|----|------|-----|---------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Mfg / Design<br>Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                 |                          |
|      |      |                    |    |      |     |                                 |                          |

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                  |                |                           |                        |                          |
|------|------|----------------------------------|-----------------------------|----------------------------------|----------------|---------------------------|------------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                  |                | Verification<br>Section C | Approval<br>Design Mgr | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Design Mgr       | Action Description<br>Design Mgr | Sign &<br>Date |                           |                        |                          |
|      |      |                                  |                             |                                  |                |                           |                        |                          |
|      |      |                                  |                             |                                  |                |                           |                        |                          |
|      |      |                                  |                             |                                  |                |                           |                        |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

NOTE: Date & initial all entries

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

**DART**

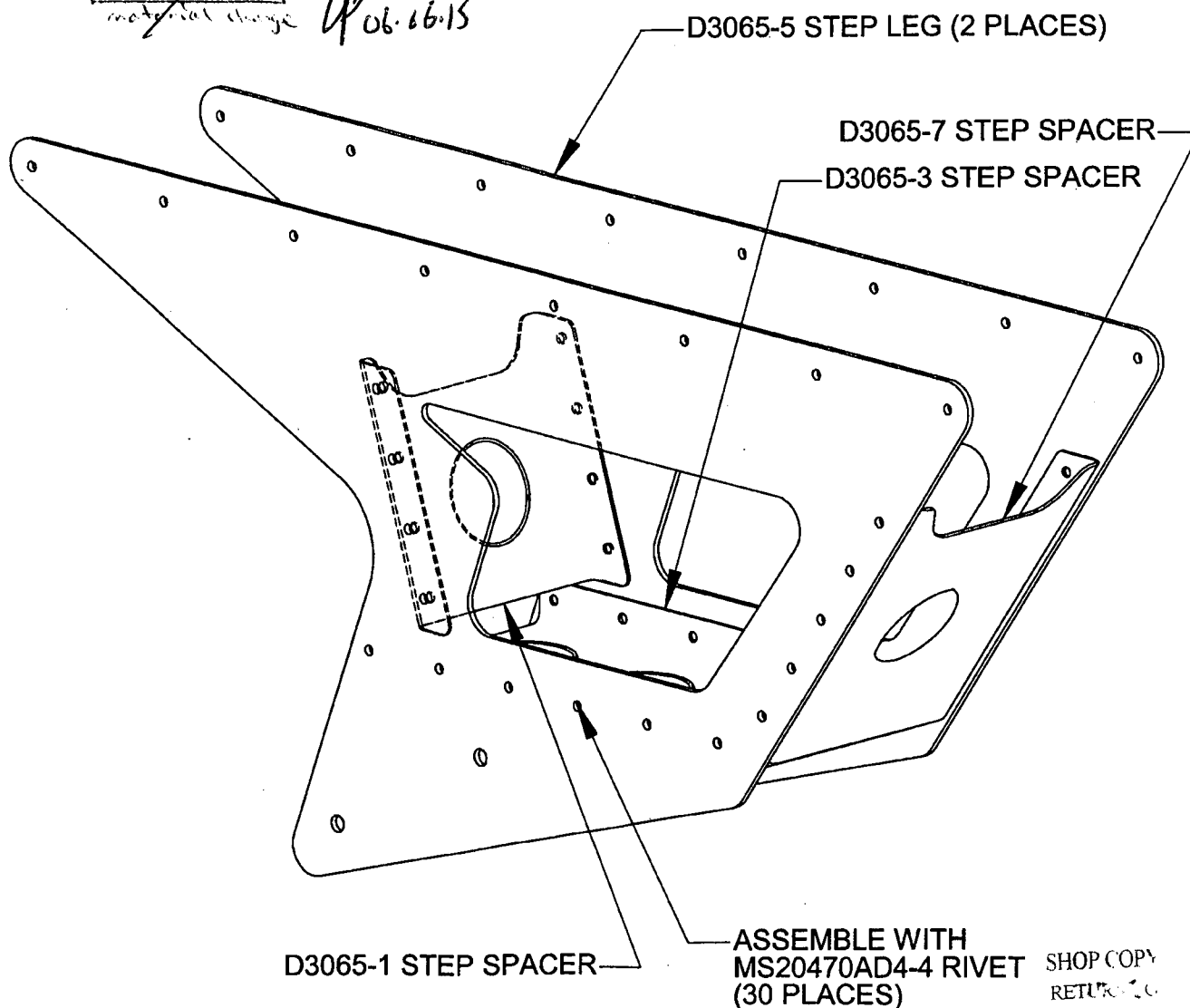
|                               |                                |  |                        |
|-------------------------------|--------------------------------|--|------------------------|
| DESIGN<br><i>CP</i>           | DRAWN BY<br><i>CP</i>          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br><b>D3065</b>                              | REV. A<br>SHEET 1 OF 5 |
| DATE<br><b>02.09.11</b>       |                                | TITLE<br><b>STEP LEG ASSEMBLY</b>                        | SCALE<br>1:2           |
| A                             | 02.09.11                       | NEW ISSUE  |                        |
| A1                            | 03.02.13 <i>CP</i>             | ADD SLOTS TO D3065-5                                     |                        |
| A2                            | 03.02.27 <i>CP</i>             | 0.531 WAS 0.410  |                        |

RELEASED  
02.01.20 *[Signature]*

**UNDER REVIEW**

06.06 02 CB  
material change

*CP* 06.06.15

**D3065-041 STEP LEG ASSEMBLY**

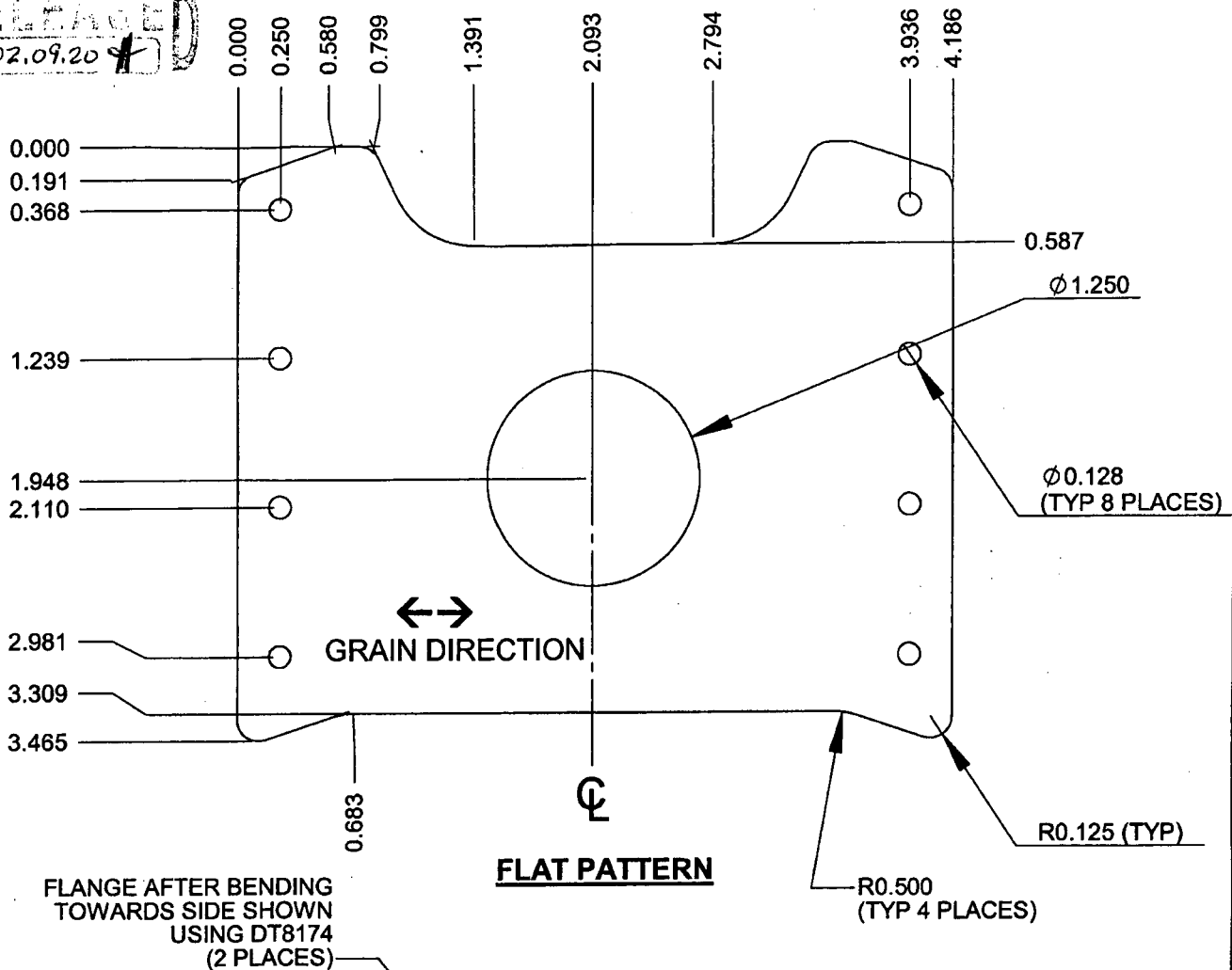
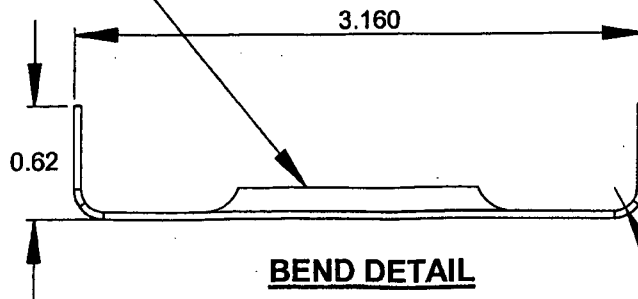
SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITH NOTICE  
NO. *27590.D*

**COPYRIGHT © 2002 BY DART AEROSPACE LTD.**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                               |                                |  |                        |
|-------------------------------|--------------------------------|--|------------------------|
| DESIGN<br><i>CP</i>           | DRAWN BY<br><i>CP</i>          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br><b>D3065</b>                              | REV. A<br>SHEET 2 OF 5 |
| DATE<br><b>02.09.11</b>       |                                | TITLE<br><b>STEP LEG ASSEMBLY</b>                        | SCALE<br>1:1           |

**RELEASED**  
02.09.20 *[Signature]***UNDER REVIEW**06.06.15 *CP*  
material changeOK *CP* 06.06.15**D3065-1 STEP SPACER**

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 4) PART IS SYMMETRIC ABOUT CENTERLINE
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY  
RETURN TO  
ENGINEERINGUNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE

WORK ORDER

NO. 27590P

COPYRIGHT © 2002 BY DART AEROSPACE LTD.

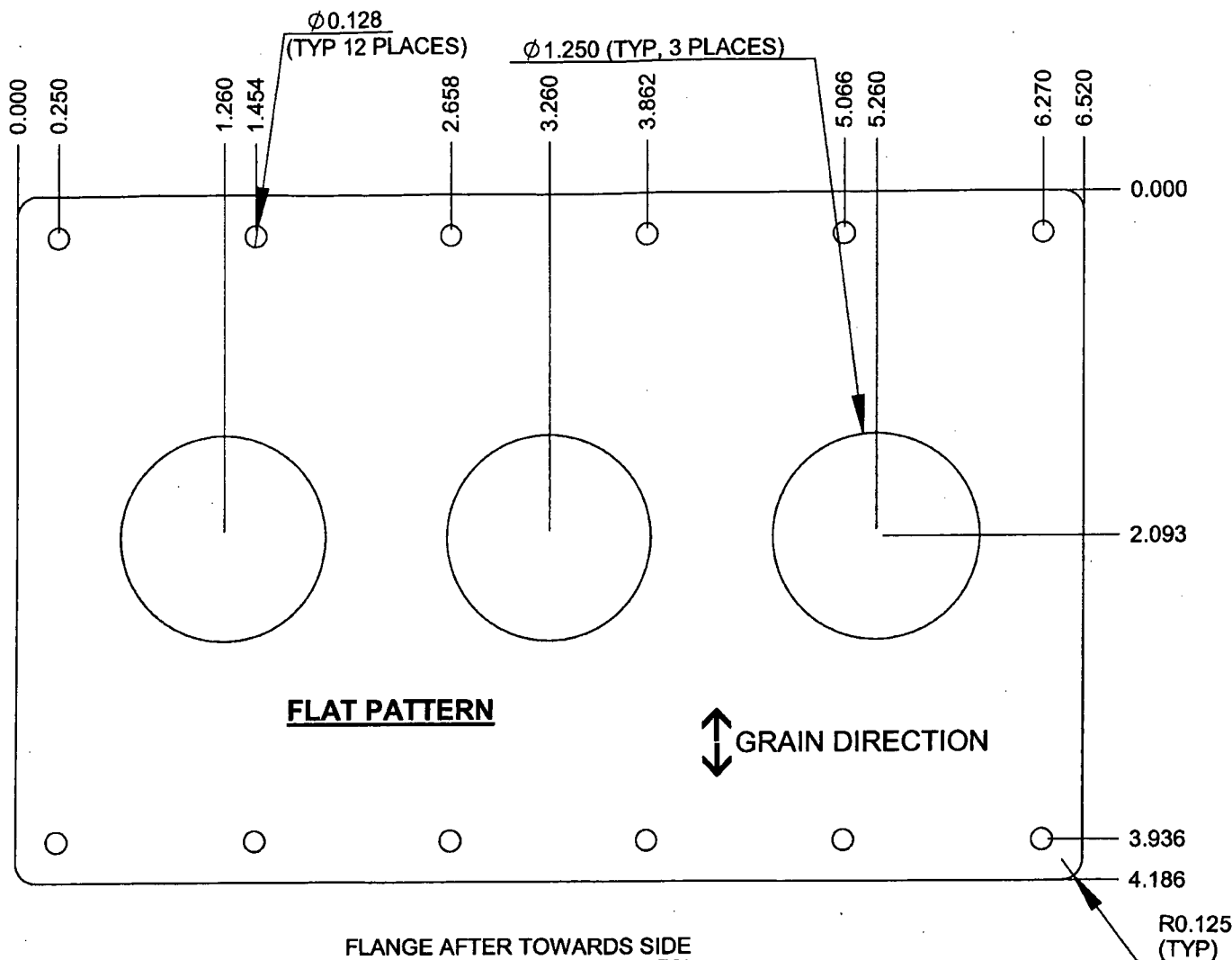
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

RELEASED  
02.09.20

**DART**



|                         |                                   |  |                        |
|-------------------------|-----------------------------------|--|------------------------|
| DESIGN<br><i>CP</i>     | DRAWN BY<br><i>CP</i>             | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br><i>A</i>     | APPROVED<br><i>A</i>              | DRAWING NO.<br><b>D3065</b>                              | REV. A<br>SHEET 3 OF 5 |
| DATE<br><b>02.09.11</b> | TITLE<br><b>STEP LEG ASSEMBLY</b> |  | SCALE<br>1:1           |



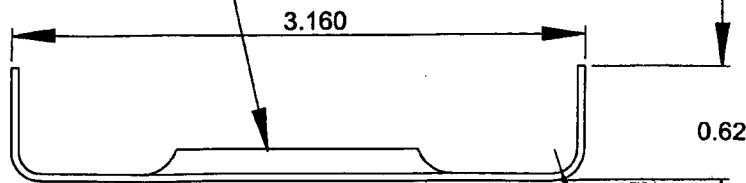
UNDER REVIEW

06.06.02 CB

material change

OK

06.06.15



### D3065-3 STEP SPACER

- 1) MATERIAL: 2024-T3 (QQ-A-250/4)  
0.040 THICK (REF DART SPEC. M2024T3S.040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

### BEND DETAIL

SHIP COPY  
RETURN TO  
ENGINEERING

UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK ORDER  
NO. 27590 D

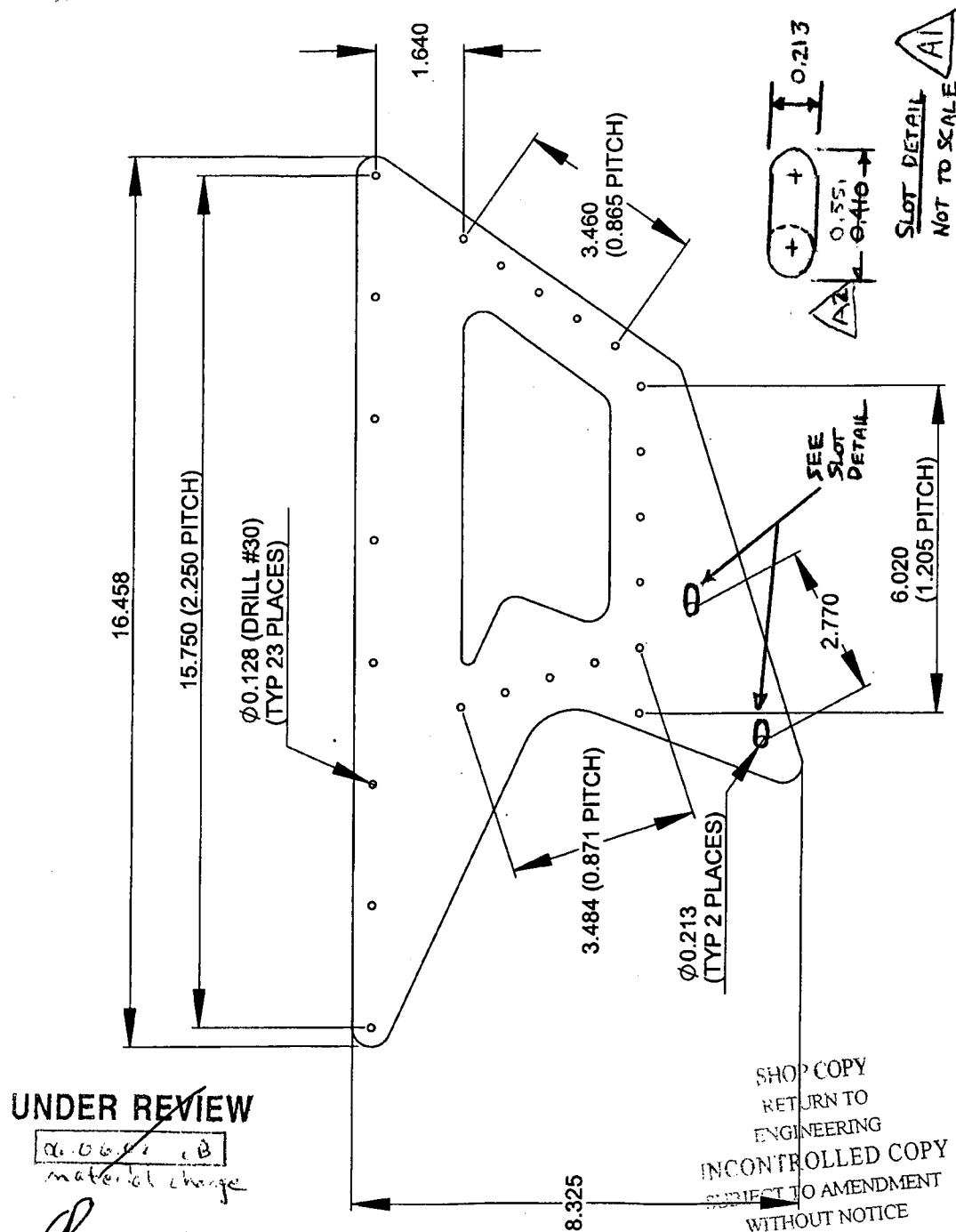
COPYRIGHT © 2002 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

**DART**

|                               |                                |  |                        |
|-------------------------------|--------------------------------|--|------------------------|
| DESIGN<br><i>CP</i>           | DRAWN BY<br><i>CP</i>          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br><b>D3065</b>                              | REV. A<br>SHEET 4 OF 5 |
| DATE<br><b>02.09.11</b>       |                                | TITLE<br><b>STEP LEG ASSEMBLY</b>                        | SCALE<br>1:3           |

RELEASED  
02.09.20 *[Signature]*

**UNDER REVIEW**

*0.06.11* *CB*  
material change

*P 06.06.15*

SHOP COPY  
RETURN TO  
ENGINEERING  
INCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. *27590 D*

**D3065-5 STEP LEG**

- 1) MACHINE PER DWG FILE "D3065-5.SLDPRT"
- 2) MATERIAL: 5052-H32 (QQ-A-250/8) 0.080 THICK (REF DART SPEC. M5052H32S.080)
- 3) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

**COPYRIGHT ©2002 BY DART AEROSPACE LTD.**

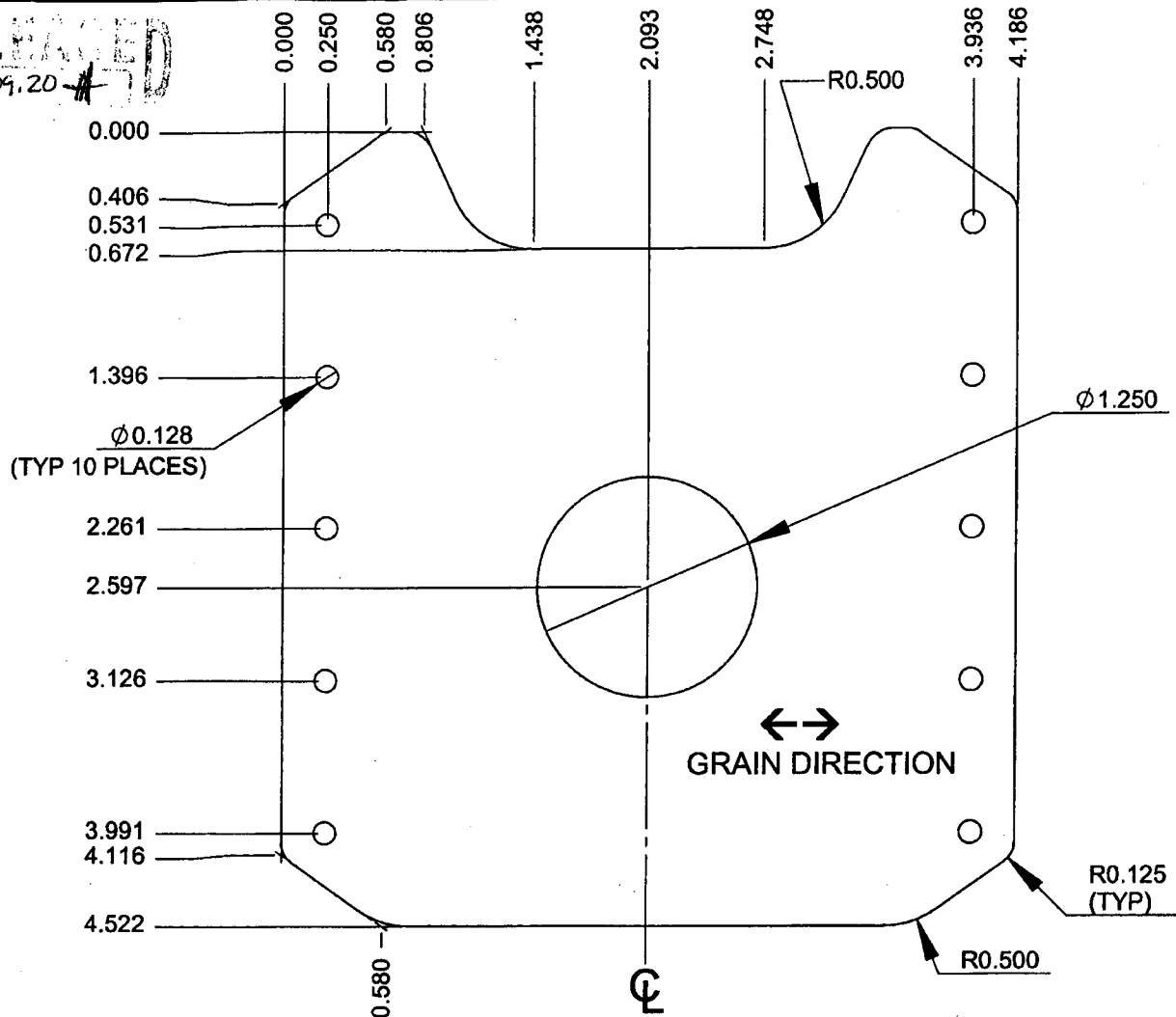
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.



**DART**

|                               |                                |  |                        |
|-------------------------------|--------------------------------|--|------------------------|
| DESIGN<br><i>CP</i>           | DRAWN BY<br><i>CP</i>          | <b>DART AEROSPACE LTD</b><br>HAWKESBURY, ONTARIO, CANADA |                        |
| CHECKED<br><i>[Signature]</i> | APPROVED<br><i>[Signature]</i> | DRAWING NO.<br><b>D3065</b>                              | REV. A<br>SHEET 5 OF 5 |
| DATE<br><b>02.09.11</b>       |                                | TITLE<br><b>STEP LEG ASSEMBLY</b>                        | SCALE<br>1:1           |

RELEASED  
02.09.20



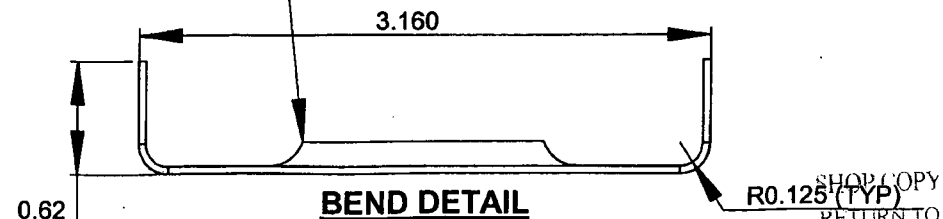
FLANGE AFTER BENDING TOWARDS  
SIDE SHOWN USING DT8174 (2 PLACES)

**FLAT PATTERN**

UNDER REVIEW

06.06.15 (13)  
material change

OK *CP* 06.06.15



**BEND DETAIL**

SHOP COPY  
RETURN TO  
ENGINEERING

**D3065-7 STEP SPACER**

- 1) MATERIAL: 2024-T3 (QQ-A-250/4) 0.040 THICK (REF DART SPEC. M2024T3S040)
- 2) FINISH: ACID ETCH & ALODINE PER DART QSI 005 4.1
- 3) PART IS SYMMETRIC ABOUT CENTERLINE
- 4) BREAK ALL SHARP EDGES 0.005 TO 0.010
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

CONTROLLED COPY  
SUBJECT TO AMEND  
WITHOUT NOTI

WORK ORDER  
NO. 27590

COPYRIGHT ©2002 BY DART AEROSPACE LTD.

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

